

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PAT MCCRORY GOVERNOR ANTHONY J. TATA SECRETARY

June 11, 2014

Addendum No. 1

RE: Contract ID C203360 WBS # 35029.3.D1 State Funded

Wake County (U-4432)

SR-1370 (Tryon Road) From West of Bridge #259 Over Norfolk Southern Railway To US-70/NC-50 (Wilmington Street)

June 17, 2014 Letting

To Whom It May Concern:

Reference is made to the proposal form furnished to you on this project.

The following revisions have been made to the proposal:

On Page No. 89 the section titled 'Sealed As Built Plans' within the project special provisions entitled "Utility Construction" has been revised. On Page Nos. 91 and 92 Section IV titled "Sealed As Built Plans" within the project special provisions entitled "Utility Construction" has been deleted. Please void Page Nos. 89 thru 92 in your proposal and staple the revised Page Nos. 89 thru 92 thereto.

Sincerely,

R. A. Garris, PE Contract Officer

RAG/jag Attachments

cc: Mr. Ron Hancock, PE

Mr. Wally Bowman, PE Ms. D. M. Barbour, PE Mr. Rodger Rochelle, PE

Mr. R.E. Davenport, PE Ms. Lori Strickland Mr. Ray Arnold, PE

Ms. Natalie Roskam, PE Mr. Dwayne Sykes, PE Mr. Ronnie Higgins

Ms. Marsha Sample

Project File (2)

RALEIGH NC 27699-1591



e. In the event that two successive bacteriologic tests fail, that section of the main shall be rechlorinated by the contractor and new tests performed prior to moving to the next section of main.

Water Main and Service Abandonment:

Contractors abandoning water services shall remove the entire service including the corporation cock and insert a plug in the main. When plugging the line is not available, the corporation cock may be turned off, capped, and surrounded with 1 ft3 of concrete. All remaining portions of the service shall be removed from the main to the right of way line and shall be disposed of properly. Water main abandonment must be performed in accordance with a plan approved by the Public Utilities Department. Service and main abandonment require inspection by the Public Works Department at 890-3030.

Surveyed As Built Plans:

Certified surveyed "As built" plans and profiles, sealed by a Professional Land Surveyor, shall be furnished to the Resident Engineer for transmittal to the Public Works Department upon completion and acceptance of the public main by the City and completion of private systems. The surveyed "as built" plans shall have North Carolina Geodetic Survey grid coordinates to all meter boxes, valves, manholes, and mains along with the depth information. The water permit number information must also be included. Surveyed "As built" plans of installed utilities shall be furnished to the City prior to issuance of the letter of acceptance. All service stubs shall be shown on the surveyed "as built" plans.

Certified surveyed "As Builts" should be provided in a digital format. The digital file of utilities needs to show the overall water and sewer system layout along with the property or subdivision boundaries and connecting manhole. The water distribution system drawings should show mains sizes, material, hydrants, valves, blow-off assemblies, and any other relevant information (backflow preventers, air release valves, etc.). The digital file should be delivered in DXF format. If this is not possible, then, DWG, DGN, and SHP are also acceptable formats.

Engineering certification for environmental permits and final quantities will be performed by the NCDOT Engineer.

Sewer Construction Plugs:

- a. A sewer plug permit must be obtained prior to beginning construction. See General Policies and Regulation Section for application.
- b. Mechanical plugs (non-pneumatic) must be installed throughout the time of construction of any sanitary sewer extension. Plugs are to be installed on the downstream end of the new main at the first manhole from the existing tie-in, until final acceptance.



- c. All plugs must be securely tied off with steel cable within the manhole and must have a secure marking attached to the plug indicating the utility contractor to whom the plug belongs.
- d. All plugs must be monitored during construction to insure the plug is functioning as required.
- e. Prior to removing the plug, the contractor must sign a plug removal form verifying that the sewer facilities are sufficient and functionally complete. All plugs must be removed by the contractor upon acceptance that the sewer facilities are sufficiently functionally complete to accept flow and PRIOR to the mains above the plug location being placed into service and/or accepting any flow of sewage.

Material Specifications:

When brand names of materials have been determined, the Contractor shall obtain approval, through the engineer and the owner prior to their use and/or installation.

Then Contractor shall furnish, but is not limited to furnishing, catalog cuts and/or shop drawings of the materials. Thirty days shall be allowed for the engineer's review of each submittal eight copies of each catalog cut and/or shop drawing (signed and sealed) shall be submitted.

Bedding Material:

Bedding material for utility lines shall be installed in accordance with the applicable City of Raleigh Public Utilities Handbook, as shown on the utility construction plans, and/or as directed by the Engineer.

Bedding material shall meet the requirements of Article 1016-3 of the Standard Specifications; bedding material shall be installed in accordance with Articles 300-6 and 300-7 of the Standard Specifications and the detail sheets which are part of the Utility Construction Plans.

Ductile Iron Restrained Joint Water Pipe:

Ductile iron restrained joint water pipe shall be installed in accordance with the applicable utility provisions herein, as shown on the utility plans and/or as directed by the Engineer.

Ductile iron restrained joint water pipe shall be, at a minimum pressure class 350, and shall conform to ANSI A21.51 (AWWA C151). Push-on joints for such pipe shall be in accordance with ANSI A21.11 (AWWA C111). Pipe thickness shall be designed in accordance with ANSI A21.50 (AWWA C150) and based on laying conditions and internal pressures as stated on the plans.

Cement mortar lining and seal coating for pipe shall be in accordance with ANSI A21.4 (AWWA C104). Bituminous outside coating shall be in accordance with ANSI A21.51 (AWWA C151).

All ductile iron restrained joint water pipe shall be installed in accordance with laying condition Type 2 as stated in ANSI A21.51 (AWWA C151) unless otherwise shown on the plans.

Ductile iron restrained joint pipe shall be manufactured to the lengths required. Cutting of ductile iron pipe by the contractor will not be allowed.

Pressure Test, Leakage Test and Sterilization:

The pressure test, leakage test and sterilization of the main shall be performed as provided for the in the NCDOT Standard Specifications and in accordance with City of Raleigh Public Utilities Department Handbook.

Ductile Iron Restrained Joint Force Main Pipe:

Ductile iron restrained joint force main (sanitary sewer) pipe shall be installed in accordance with the applicable utility provisions herein, as shown on the utility plans and/or as directed by the Engineer.

Ductile iron restrained joint water pipe and fittings shall be, at a minimum pressure class 350, and shall conform to AWWA Standards and other standards referenced above in the section titled "Ductile Iron Restrained Joint Water Pipe". Push-on joints for such pipe shall be in accordance with ANSI A21.11 (AWWA C111). Pipe thickness shall be designed in accordance with ANSI A21.50 (AWWA C150) and based on laying conditions and internal pressures as stated on the plans.

All force main pipe shall be lined with Protecto 401 by a competent firm with a successful history of applying linings to the interior of ductile iron pipe and fittings. Pipe lining application, and surface preparation, to be consistent with the City of Raleigh Public Utilities Handbook.

The pressure test, leakage test and sterilization of the main shall be performed as provided for the in the NCDOT Standard Specifications and in accordance with City of Raleigh Public Utilities Department Handbook.

Check Valve in Manhole

<u>Page 15-13, Subarticle 1525-2 Utility Manholes Materials, add the following paragraph to the end of the section:</u>

Check Valve in Manhole

A 12" check valve and manhole will be installed as shown on sheet UC-4 and detailed further on Sheet UC-3.

Measurement and Payment: 12" check valve with 5' I.D. pre-cast manhole, installed in accordance with the Drawings and provisions herein and accepted, will be measured and paid per each at the contract unit price for "12" Check Valve and Manhole." Payment will be full compensation for furnishing all labor, coordination, equipment, material, valve, pipe accessories, DI fittings, dismantling joint, pipe supports, gaskets, pipe plugs, seals, manhole (including stone base, frame, and cover), excavation, backfilling, anchoring, pressure testing, and incidentals necessary to complete the work as required.

III. COMPENSATION:

Payment shall be made measured and paid for under NCDOT Standard Specifications items 1510, 1515, 1520, 1525, 1530, and 1540 as modified above.

No direct payment will be made for utility construction work required by the preceding provisions, which are general requirements applying to utility construction, and all of the requirements stated will be considered incidental work, paid for at the contract unit prices of the various utility items included in the contract.